## Demystifying Networking Prof. Sridhar Iyer Department of Computer Science and Engineering Indian Institute of Technology, Bombay

## Lecture - 55 Understanding the new order requirements

Messengers packets networks to bind us and connecting wires are we mysterious don't you evade us switching through the phases Professor Sridhar will demystify would us, getting through the loop use the packet tracer.

Welcome back to week 3, now in this analogy what we saw was from the first analogy where Amir was trying to send goods by sending different people with 30 kgs per person, this is not working out and now the new manager of travel zinc, which is Navneet, she has requested for two different type of orders. Now these two different type of orders will have to be dealt in two different ways and none of them can be the one we used in the first animation.

Let us discuss some of the possibilities which some of you might have already thought of. In one order it was to restock the usual office supplies regularly that is once a week. So, in that case Amir could have shipped that order regularly once a week by any means of transport that was available at that time. If that did not happen then he could either refund or restock, reship because they are not highly critical for the office functionalities.

Now, the order is which had to be delivered which were like very critical equipment. So, for those order what Amir could do is, they he could talk to a courier partner and you know ensure that this order will be delivered in this time and these will be modes of transport and all of those things. And by that he could also get acknowledgement of whether this order has reached certain point and is it going to be delayed or will it reach on time, with all those information he could be able to deliver that order as required by Navneet and even in the case if he found out some time that certain part of the order is missing or because he was proactive, he could reship the part of the order sooner.

Whereas, in the other case what they could do is, they could just send the order and in case Navneet feels that there are certain things which are out of place or certain things which are missing, he could always could always go back and talk to Amir and ask them

to reship it to them. Now this brings us to the next reflection spot. So, now, you can pause the video and take a while and think about it and maybe write or keep the answer in your mind and then we will discuss about it.

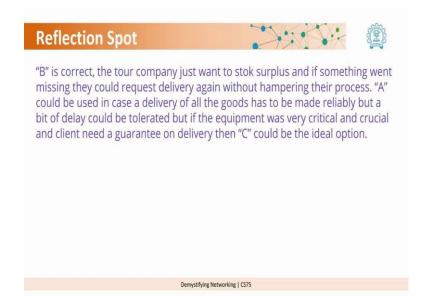
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So, the question of the reflection spot is, which of the following could be offered by Amir as delivery methods if the clients are ordering regular stock which has to keep coming quickly and if a few things go missing, the client could be refunded for those items or those items could be shipped again?

So, the options are -(A) call, confirm the request, then ship the request, confirm if it has been received and if something is missing reship it. (B) ship and if some message is received from the client, they could manage it by either say refunding or shipping it back. And (C) call confirm the request book the shipment with some agency and get a guarantee on a delivery then ship and then confirm whether it has been received or not. So, take a time and let us see which of those is the right answer.

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So, as most of you would have thought B here is the correct answer. The tour company just wants to stock surplus and if something goes missing they could request delivery again without hampering their process where as in option A could be used in case the delivery of all goods has to be made reliably, but a big delay could be tolerated. But if the equipment was very critical and crucial and the clients need a guarantee on the delivery then C could be the ideal option because you are already taking a guarantee from the shipment company that these articles will reach at that point in the desired condition.

Now, how do we connect this analogy to the world of networks? In fact, what we see is that there are similar protocols for packets to be sent across networks similar to both the solutions A and B that we have talked about. For example, UDP is more representative of B and TCP is similar to A, we will talk more about this in the future section.